ure, with wonderful rapidity. The hot sun of June and July is no hindrance but accelerates the growth; now rivers, ponds and pools are made green with the abundance of many of the more common forms; the sultry weather of August and September is favorable to the development of other varieties on moist or shaded grounds, old wood, walls, trunks of trees, &c. There is no season until the earth is again covered with snow and the rivers are bound up with thick layers of ice, in which the collector is not richly rewarded in his researches. Specimens are easily preserved. When it can be done they ought to be examined when fresh, but dried and laid aside for years, they may be taken up and examined with profit. I was particularly struck with this fact, recently examining a collection made in part, some ten and fifteen years back. The specimens retained their generic and specific characters well.

Is variety, delicacy or beauty an object, they are not excelled by the Fungi or Lichens, nor by their nearer kin the larger marine plants, that attract so much attention from the lovers of the beautiful; true, they are generally very small; the eye needs assistance and generally a good compound microscope, but the admiration and the wonder excited is none the less. A single drop of carefully collected pond water will often be found to contain a score or more of smaller forms, all perfect in symmetry, beautifully shaded with chlorophyl, or variously tinted with orange-yellow, purple or golden red. So small and yet so perfect; the wonders of the Divine mind are no less evident here than in the greater works of His design.

But in studying the life history of these plants the mind is constantly fed with new enjoyments. I cannot forget the first time I observed the "birth of an Œdogonium." I had under the microscope a number of filaments of a plant of this genus; I had been studying the form and character of the oogonias and now was taking the proportions of the length and breadth of the cells, when I saw two cells separating at the joint, aud a sack-like form slightly protruding; it was something new to me; I kept my eye on it; it moved very slowly but perceptibly, gradually protruding more and more; soon it was quite out, distorted in form from the pressure it was subjected to in passing through so narrow a passage; in less than five minutes more it changed to a perfect sphere, a head became evident in a somewhat raised colorless point with two cilia on opposite sides of it, these begin to move, the vibration becomes more rapid and communicates motion to the new born thing, it oscillates, and off it darts. In less than fifteen minutes others come to life, and now there are four or five of these "zoospores" darting about in their narrow confines in the field of the microscope. We need not wonder that such men as Ehrenberg and others classified these living spores with the infusoria, they appear to possess volition, how they dart about, but always avoid each other, never collide; the period of their existence is short, in less than half an hour they come to rest, the animal goes back again to the vegetable, they change in form from spherical to oblong, then the heads or ciliated ends gradually put forth prong-like projections, these are the rootlets of a new plant which take hold of any suitable substance near by; the plants elongate by developing cell to cell until we see duplicates of the original mother plant.

The life history of these plants is full of interest and very important for classification, and a large field is here open for investigation.

Have you a desire to make a beginning, where shall you get specimens? Are there near by larger or smaller slow streams, or sheltered angles beside more rapid waters, these are sure to contain something, Spirogyra, Cladophora, Microspora or some other of the common things; or stagnant pools will furnish Œdogonium of some variety, Zygnema, Horniospora, &c., or if you have a pond with Utricularia, or Myriophyllum, gather a quantity, take it hence and wash it by shaking it well in a bucket of clean water, let it settle, pour off the surface until you have a tolerably thick sediment, this will certainly contain some, perhaps very many varieties, of Desmids, beautiful